



Women's expectations, preferences and needs in midwifery care – results from the qualitative Midwifery Care (MiCa) study: Childbirth and early parenthood

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ABSTRACT

Objective: The main goals of our study were (I) the investigation of expectations and preferences as well as (II) the determination of needs of women in regard to midwifery care.

Design: Descriptive phenomenology was used to investigate the ways in which women experienced childbirth and early parenthood. A descriptive qualitative research design was chosen, using focus groups.

Setting: ix online focus groups were carried out with 19 women for this part of the Midwifery Care (MiCa) study, mainly from the north of Germany.

Participants: Women shortly after birth, in puerperium and the first year after childbirth were recruited in Germany. A purposeful strategy according to maximum variation sampling was applied to reach diversity in the sample regarding age and previous children. Data were analysed using qualitative content analysis, according to Mayring, with support of the qualitative data analysis software MAXQDA 2022.

Findings: Six main categories were derived for both childbirth and early parenthood: (a) involvement of family, (b) need for information, (c) physical and psychological aspects and (d) orientation in the healthcare system. In each group, one main category about provision of healthcare was developed: (e) care around childbirth and (f) midwifery care in early parenthood. Women attached great importance to the communication with midwives and favoured the involvement of their partners in the childbirth process and during parenting. Based on different experiences and inconsistency of information, women would prefer consistency in staff and communication as well as standardised information.

Conclusions: From the user's perspective, midwifery care is crucial during childbirth and the child's first year of life. Current health care during and after childbirth and early parenthood lacks individualised care models, emotional support, adequate and professional communication between different health care providers, and consistency in midwifery care. Our findings should be translated into health care delivery with effective inter-professional teamwork within the continuity of midwifery care. Further quantitative research should analyse the individual healthcare situations of women in the reproductive phase of their life as well as of the applied healthcare models in order to personalise care and to improve healthcare quality.

Introduction

Midwives are important providers in healthcare and prevention,

supporting women and families along the entire continuity of care (Lohmann 2018). Continuity of care is a concept rooted in primary care involving the care of individuals by the same care provider (Baker et al.

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2020; Bradford et al. 2022). Midwifery continuity of care includes the provision of care within the phases of family planning, pregnancy, childbirth and puerperium, whereby care is provided by the same midwife or a small team of midwives (World Health Organization 2021).

The implementation of midwifery continuity of care is highly valued by childbearing women and young parents (Homer 2016; Cummins et al. 2018). Women prefer the personalised experience, building relationships of trust through a high level of continuity of care provided by midwives (Cummins et al. 2018; Perriman et al. 2018). In Germany, midwifery practice during labour and childbirth is based on recommendations for one-to-one care by midwife. Unfortunately, the comprehensive implementation of a guideline for vaginal delivery on due date nationwide is not exercised yet (Association of the Scientific Medical Societies in Germany 2020). Additionally, this guideline is not binding and does not apply to women, who have preterm births or sections, for example. Further responsibilities of midwives are documented/stated in the §9 of the Midwives Act. Furthermore, the midwifery assistance contract including the scope of care and the remuneration assists the tasks of midwives in the postpartal/postnatal phase and differ between women with statutory insurance and privately insured persons (Midwives' Association in Germany 2009; Midwives' Association in Germany 2022).

Childbirth experience is important for every woman and can be crucial for future physical and mental health of both mother and child/children, which has also been acknowledged by the World Health Organization (WHO) (World Health Organisation 2018): Throughout childbirth, puerperium and up until the end of the first year after childbirth and longer, even if breastfeeding takes longer than a year, medical and psychosocial care can be provided by midwives.

Following childbirth, during the puerperium, every woman in Germany is entitled to the support of a midwife for at least twelve weeks. In case of complications, midwives provide healthcare and support for the whole family until the end of the breastfeeding period. Additionally, six more visits by the midwife can be arranged regularly during three further months, when the infant has feeding problems or needs support for introducing complementary food. Midwives support families in the puerperium phase by answering questions concerning the health of child and mother. They are key contact persons during the phase of major physical and mental changes. It is crucial that midwives accompany the physiological progress of women's puerperium, complemented by individually acquired additional skills (e.g., baby carrier support, baby massage, specific breastfeeding advices) and, if necessary, refer to other medical professionals regarding vaccinations, motor development raising to potential abnormalities, clear pelvic floor problems, etc.

The main topics covered by midwives after childbirth and especially in the vulnerable phases shortly after childbirth are first experiences and bonding with the child, observing the regression and healing processes of the mother's body, breastfeeding, nutrition and assessing the emotional state (Midwives' Association in Germany 2022). Furthermore, midwives are responsible for the observation of behaviour and physical development of the newborn, the healing of the umbilical cord stump and the development of any newborn jaundice. They provide information about the screening examination and possibly take blood from the newborn's heel on the 3rd day of life to determine a possible metabolic disorder, taking place as part of a metabolic screening, both in clinical setting and at home, if it has not been taken in hospital. They guide the parents in practical baby care, explain the different strategies in prevention, for example, check-ups, provide information about feeding formula if necessary and advise on contraception after birth. Midwives might also offer courses in both prenatal exercises and in the postpartum, pelvic floor exercises, natural family planning and baby massage (Midwives' Association in Germany 2022). The midwifery work ends, when the continuity of care is completed and all care aspects, for example ab lactating, normalising of feeding, sleeping, nutrition and psychological stabilisation.

In midwifery, woman-centred care as a philosophical and a

pragmatic concept has become well known in the last decades (Fontein-Kuipers et al. 2018). This concept prioritises the woman's individual unique needs (organisational, healthcare-related childbirth-specific and postpartum-related), as defined by the woman herself, assigns the woman choice, control and continuity of care, emphasises the woman-midwife relationship and thus requires dialogue in line with evidence from qualitative research (Fontein-Kuipers et al. 2018). Descriptive phenomenology is one of the most commonly used methods in qualitative research to describe women's experiences and needs within the phenomenon of childbirth and early parenthood.

Midwifery healthcare service currently faces multiple challenges. On the one hand, birth and the postpartum period come with increasing complexity due to higher age in primiparae, increased prevalence of chronic diseases such as (gestational) diabetes and higher rates of multimorbidity (Zyriax et al. 2022). On the other hand, there has been a lack of midwives in Germany for more than ten years (Zyriax et al. 2022). Moreover, midwifery healthcare provision as well as education is lacking evidence-based approaches (Zyriax et al. 2022). Therefore, midwifery training was reformed in the EU education standard in 2020 (Plappert et al. 2019). In Germany, several university programmes to obtain a bachelor's degree in Midwifery were recently implemented with the aim to educate experts providing evidence-based care throughout all phases of midwifery care in inpatient and outpatient settings (Plappert et al. 2019). The transfer of knowledge from university to the training in different workplaces the students are deployed in, and vice versa, is essential in developing and revising the curriculum. This makes country-specific research necessary. Therefore, we focused on Germany specific research within midwifery care. The necessity of conducting this study becomes evident in light of the discontinuity in midwifery care and the tailored midwives' healthcare services within the German healthcare system concerning this vulnerable phase of life, which has impacts and consequences for overall and long-term family health.

Thus, in promoting midwifery healthcare services, the knowledge based on women's expectations, preferences and needs is crucial not only for appropriate support of delivery and puerperium, but also for research (Mattern et al. 2017) and for educational purposes of midwives. In Germany, there is a lack of qualitative studies investigating the needs and wishes of women regarding midwifery care (Mattern et al. 2017). Internationally, we found more evidence, for example regarding mindfulness-based childbirth and parenting (Duncan et al. 2010), predictors of women's perceptions of their birth experience (Bryanton et al. 2008), investigating the influence of childbirth expectations on women's perceptions of their birth experience (Hauck et al. 2007) and analysing childbirth experience in women who participated in a continuity of care model (Hildingsson et al. 2021) provided by midwives. Moreover, research was conducted internationally about women's satisfaction with antenatal, intrapartum and postpartum care within continuity of care by a primary midwife (Forster et al. 2016). There is also international evidence on parental experiences of early postnatal discharge (Nilsson et al. 2015).

Considering the limited amount of evidence, investigating expectations, preferences and needs of pregnant women in regard to midwifery care in the respective healthcare system using qualitative research methods is essential. We based our overall research strategy on the sequential exploratory design described by (Vedel et al. 2019), beginning with a descriptive qualitative study, using focus groups and interviews for an in-depth understanding of expectations, preferences and needs of women in midwifery care, and analysing data inductively. Based on results of the present study, we plan to quantitatively evaluate the quality of care by developing an instrument with which we intend to facilitate the adequate depiction of the care situation of women and to personalise care. The development of a tool to assess the quality of healthcare and to evaluate women's needs and benefits of midwifery care may be advantageous for healthcare during the whole midwifery continuity of care, including family planning, pregnancy, birth,

puerperium, and breastfeeding (Sayn-Wittgenstein 2007; Bradford et al. 2022). This conceptual extension of the continuity of care model and the suggestion to act within a systematic and integrated approach make our study innovative and beneficial.

Methods

In our study, a descriptive qualitative study was conducted by collecting qualitative data along the whole midwifery continuity of care. In light of the large amount of study results, we decided split our study into two parts, namely (1) preconception and pregnancy (the companion paper by Janke et al. 2024) and (2) childbirth and early parenthood (this paper). In the second part of this descriptive qualitative study, we aimed to investigate expectations, preferences and needs of women regarding the phases of childbirth and early parenthood. We used a descriptive phenomenology approach to do this. Identifying needs and evaluating benefits of midwifery care could advance healthcare during childbirth, puerperium, and breastfeeding and may lead to a more personalised approach in healthcare provision.

Ethical aspects

The study complies with all relevant national regulations, institutional policies and is in accordance with the tenets of the Helsinki Declaration. This study was approved by the Local Psychological Ethics Committee of the University Medical Center Hamburg-Eppendorf (LEPK-0427). Every participant has read and signed informed consent, covering the study participation, processing the data, data protection aspects and publishing the results.

Study participants, setting and sampling techniques

We included women in their postpartum phase up to one year after childbirth. Sufficient German language skills were the main criterion for inclusion into the focus groups. We applied a purposeful sampling strategy using maximum variation to achieve diversity in the study sample regarding age and number of children. Additionally, we looked at the occupation of the study participants and the profession of their partners, as well as their spatial location and city district.

Study participants were recruited via midwives, social media, personal contacts and a newsletter at the study center, UKE, Hamburg, Germany. The study information, conditions of participation (in this case, time around the childbirth and birth of place such as hospital or birth center and early parenthood), contact address and telephone number of the person responsible for the study (TMJ) were distributed via the channels mentioned above. Information about the financial incentive (€ 20, provided to increase motivation for participation and to appreciate the effort participants made) was also published in advance. During the following month (after the advertisement was distributed), the women interested in participation contacted us via e-mail and telephone. We assembled the groups for focus groups. The person responsible for the study (TMJ) did not know study participants beforehand. Planning the study, we decided to follow the approach of recruitment until data saturation. Such data collection approach left the opportunity open to recruit more participants until information saturated. Ultimately, we carried out six focus groups (three with women on childbirth and three with women on early parenthood issues) with two to five participants each in both groups. We did not challenge with dropouts within this study. All participants who signed informed consent participated in focus groups. Short-notice cancellations due to illness or for any other personal reason took place prior to obtaining informed consent signatures.

Data collection procedure

Focus groups were conducted using semi-structured pre-tested

guidelines (Kitzinger et al. 1999) as this method allows for fruitful discussions between multiple individuals.

Two researchers (TMJ, NM or ME) were involved in conducting each focus group: one researcher guided the interview (either TMJ or NM), a second researcher was present to document the course of conversation (TMJ, NM or ME). The involvement of two researchers in the data collection was essential in this qualitative research approach to ensure data quality. These ensured that the most important topics were covered, while giving space to new issues raised by the participants during the focus groups. Participants were split into two different sub-samples: one talking about childbirth and one talking about early parenthood. Researchers experienced in qualitative studies (TMJ and NM) prepared and pilot-tested semi-structured focus group guides. These semi-structured guidelines ensured that the most important topics were covered, while at the same time giving the researchers the freedom to dive deeper into new topics raised by participants. Data were assessed between November 2021 and April 2022. As a result of the Covid-19 pandemic, focus groups were conducted at the study center, UKE on-line via zoom-software. Focus groups lasted between one and one and a half hour, and began with a round of introduction by researchers, their area of research, their role in the research group, and their experience in qualitative research. Afterwards study participants were briefed on the purpose of the study and the reason for conducting the study. Since the main inclusion criterion for the participation was the knowledge of German language, both the focus groups guides were conducted and the focus groups were performed in German. For the focus groups guides we brainstormed beforehand about what we thought were the most important issues to address for the childbirth and early parenthood. Fig. 1 summarises central themes and subthemes that were discussed in focus groups which we translated into English in order to present them accordingly.

Data management and analysis

Focus groups were audio recorded and transcribed verbatim. Two student assistants transcribed the recordings. Two researchers (TMJ, NM) were involved in data analysis. The audio recordings were randomly checked to match the respective transcripts to ensure data quality. Data was analysed using qualitative content analysis according to Mayring (Mayring 2015) with the qualitative data analysis software MAXQDA 2022 (VERBI software, 2021, Berlin, Germany). After familiarisation with the data, content-bearing text passages were paraphrased. Text passages with the same content were subsumed into the same paraphrase. From this, paraphrases were clustered into categories. In an iterative process, categories were then clustered into higher-level categories. Two researchers (TMJ, NM) coded and categorised the data independently to ensure reliability of results. After the independent categorisation process, results were merged and discrepancies discussed. We aimed to reach no more than three to four hierarchical levels of categories to keep the category system clear and manageable. Supplementary Box S1 exemplifies this process, using MAXQDA, as well as the subsequent translation of categories from German to English. New participants were recruited until the category system reached saturation, meaning that no new themes emerged from additional participants.

The whole category system was clustered into the phases of midwifery care. In this process, it was decided to combine the data from the groups in childbirth and early parenthood. As it was possible that phase-specific groups touched upon topics of other phases, we decided to categorise the data according to the phase that was discussed, not according to the predefined recruited groups.

We adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) statement (Tong et al. 2007). The completed checklist is provided in Supplementary Table S1.

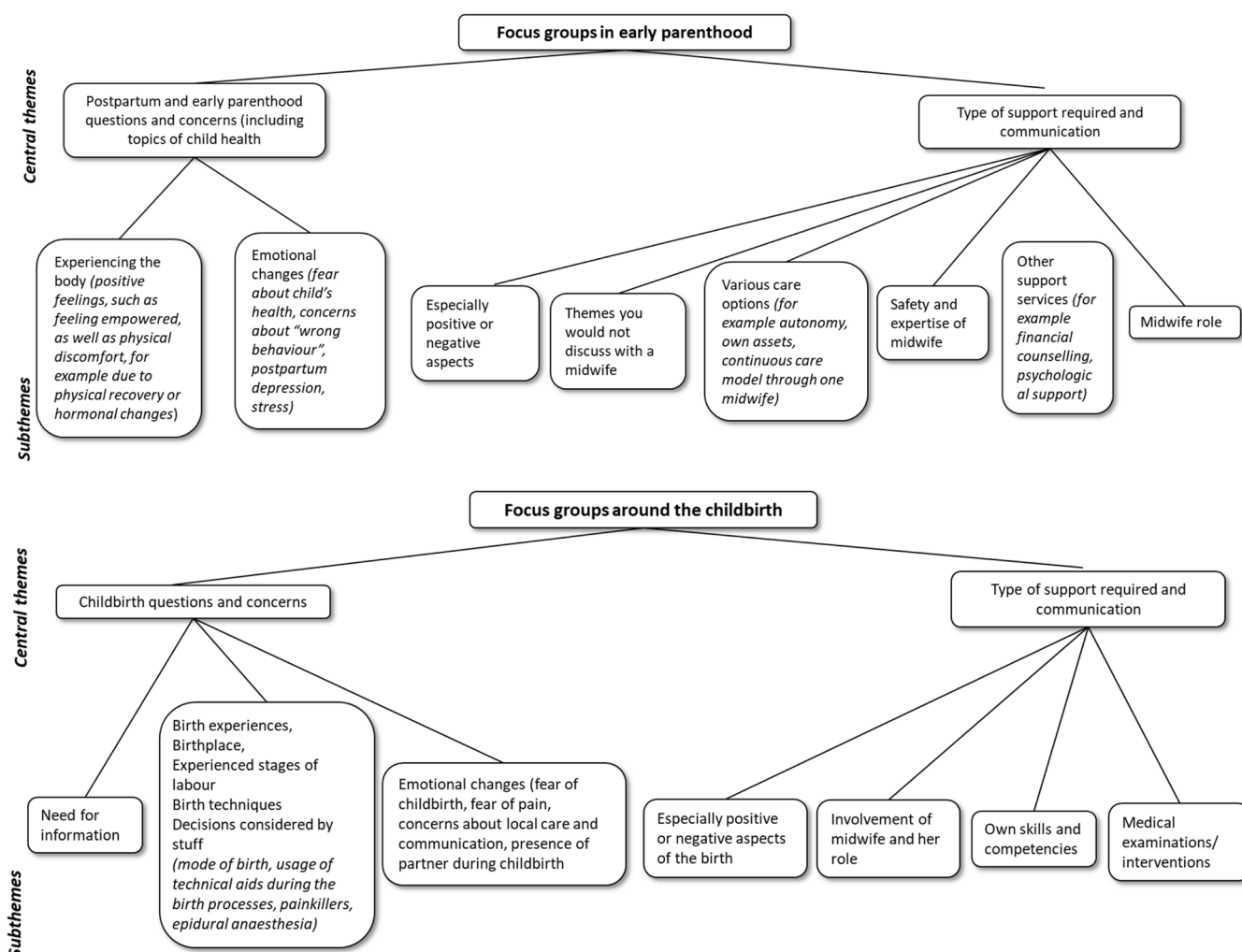


Fig. 1. Central themes and subthemes that were discussed in focus groups with women shortly after childbirth and during the first year after childbirth. These themes were predefined by interview guidelines.

Results

A total of 45 women participated in the study across all phases (from pre-conception to early parenthood). Of these, 19 women were in the first year after childbirth and took part in a focus group about either childbirth or early parenthood. The mean age was 33.7 (range: 28–40) and the participants had no or one child prior to the study. All except one were in a relationship. The mean age of the partners was 34.7 (range: 30–45). Additionally, we paid attention on both the occupation of the study participants and the profession of their partners, as well as their spatial location and city district. Women's occupations in this study part ranged from human resources, project and quality management, marketing and sales, healthcare and nursing to teaching. Partners' occupations were town planners, head of department, deputy district IT manager, IT engineers, sales engineers, management consultant, technician, warehouse worker, healthcare worker, researcher, doctors and teachers. The majority of study participants came from around of the metropolitan region Hamburg including Stade, Pinneberg, Bargteheide and Drochtersen, from different city districts of Hamburg such as Bahrenfeld, Eppendorf, Eimsbüttel, Barmbek, Bergedorf, Groß Borstel, Hohenfelde and Lokstedt. Three study participants came from Hannover, Munich, and Dachau. More baseline characteristics for study participants are shown in Table 1.

We developed six main categories regarding both childbirth and early parenthood: (a) involvement of family, (b) need for information,

Table 1

Baseline characteristics of study participants.

Variable	Entire sample (n = 45)		Women in first year after childbirth (n = 19)	
	M (SD)	Range	M (SD)	Range
Age of woman	33.2 (3.8)	24–42	33.7 (3.2)	28–40
Age of partner	34.7 (6.0)	27–52	34.7 (4.8)	30–45
Number of prior children	0.4 (0.6)	0–3	0.2 (0.4)	0–1
	n	%	n	%
Topic of focus group				
Pre-conception	5	11.1	–	–
Early pregnancy (≤ 24 th week)	9	20.0	–	–
Late pregnancy (> 24 th week)	12	26.7	–	–
Childbirth	10	22.2	10	52.6
Early parenthood	9	20.0	9	47.4
Federal state of Germany				
Bavaria	2	4.4	2	10.5
Baden-Wuerttemberg	2	4.4	–	–
Hamburg	25	55.5	12	63.2
Lower Saxony	9	20.0	3	15.8
Schleswig-Holstein	6	13.3	2	10.5
Thuringia	1	2.2	–	–

(c) physical and psychological aspects and (d) orientation in healthcare system. In each group, one main category about provision of healthcare was derived: (e) care around childbirth and (f) midwifery care in early parenthood.

The final category system including main categories and primary subcategories is shown in Table 2.

Childbirth

Care around childbirth

Women emphasised that they needed emotional support and good communication during the childbirth process. They wanted their midwife to be present in the delivery room, to be heard and to be taken seriously. They asked for empathy and a relaxed and informal relationship with the staff at the birthing unit / delivery ward. It was important for them to receive support from and to cooperate with their midwife during this process. In case of adverse experiences during childbirth, the women would value a debriefing in the postpartum. Options and needs throughout the delivery should be discussed beforehand and there should be constant communication about the process and decisions that might become necessary during the birthing process. Receiving good guidance and being involved in the course of childbearing was important. The women emphasised that midwives were an

important stakeholder at this time. While some stated that they would prefer to know the midwife who is present during childbirth, others expressed that this would not be necessary. Due to shift changes and long deliveries, some women had concerns regarding changing staff, especially midwives, while others reported positive experiences with changing midwives and appreciated that different professional groups were involved in this process. The women wanted to be involved in decisions during their birthing process. This included decisions made prior to childbirth, such as homebirth or outpatient delivery, as well as decisions during childbirth, such as wishing for a childbirth as natural as possible, decisions for birthing positions, but also trusting in clinical decisions made by the staff. The women asked for a balance between being able to keep control and not become dependent during the childbirth and being able to hand over responsibility and have the midwife as an advocate to be able to concentrate on the childbirth.

„I would just like the process in the hospital to be handled very carefully with women, that they are taken seriously, that they are taken seriously even if they are a first-time mother.“ (33 years, 1st child)

„Then there was the guidance from the midwife in the hospital, which was excellent. She knew exactly what I needed to do and what contraction I was having, and I felt like I had a complete care package, whereas before I hadn't really had any guidance, but suddenly I had all the resources around me because I was so far along.“ (34 years, 1st child)

Table 2
Category system including the clusters childbirth and early parenthood (dark grey) with main categories (light grey) and subcategories (white).

Childbirth	Early parenthood
Care around childbirth	Midwifery care
Responsibility and control Groups of involved professionals Inclusion in and own birth decisions Emotional support by care providers Communication	Responsibility and control
	Reachability of the midwife Competencies of the midwife Continuity of Care Relationship with midwife
Involvement of family	Involvement of family
Siblings Partner	Siblings Partner Family and friends
Need for information	Need for information
Topics and questions (What?) Availability of information (How?)	Topics and questions (What?) Availability of information (How?) Source of information (Where?)
Lack of previous experiences with first child	
Physical aspects	Physical aspects
Aftercare following birth	Perception of bed rest Health of the child Control of the healing process Physical changes Medical care of the mother Problems with breastfeeding
Orientation in healthcare system	Orientation in healthcare system
Communication within the system Resources of the staff	Utilisation of services and courses Referral to other care providers
Psychological aspects	Psychological aspects
Experiencing own strength Worry about the child Worries about or fear of childbirth	Support by midwife Psychological state after birth Mothers' needs Previous experiences Finding your way in the new everyday life

Involvement of family

The importance of partners being present throughout the whole process was emphasised by women. Furthermore, they wished for the staff to not only focus on the woman giving birth but also to communicate with their partners and for them to be supported as well. For women who had given birth before, it was important that the firstborn was able to meet the new sibling rather soon.

„Being in the delivery room and having my partner back with me helped me to calm down a little. I was able to find my way back to myself and then I was able to use this technique of deep breathing again.“ (33 years, 1st child)

„The sibling was not allowed to come to the hospital. This means that my son hasn't been in hospital, I've been in hospital for five days in total and he hasn't been able to meet his newborn sister at all.“ (39 years, 2nd child)

Need for information

The information women received should be consistent both over time and between different providers. Required information includes guidance and knowledge prior to childbirth, such as receiving helpful advice in childbirth preparation courses and receiving information about processes beforehand, as well as after childbirth, such as support regarding the handling of the child and breastfeeding. The need for information was especially high in women who gave birth to their first child.

„Because of the shift system, it doesn't work in the hospital, you always have different people. It means that you are told different things all the time. You always getting different recommendations. I felt completely unsure. I didn't even know what to do anymore.“ (31 years, 1st child)

„When I gave birth for the first time, I still believed that if I had a lot of pain, I would have an epidural, so I waited until I really couldn't stand the pain and then I said: 'OK, now I would have an epidural'. What I didn't realise was that it would be another hour or two before the pain would subside. Then I was so exhausted that I thought, 'OK, I didn't know that. What is the process like?' I would like to have a little bit more information in advance about the options for pain medication, or how long it will take, or what needs to be done.“ (39 years, 2nd child)

Orientation in the healthcare system

On a structural level, women criticised a lack of communication and a lack of staff resources during their hospital stay. This referred to communication between hospital wards, between professional groups, towards the women and towards the midwife responsible for outpatient care at home after birth. Lacking staff resources became obvious to the women due to poor availability of the staff and delays in examinations. In contrast, one woman receiving one-on-one care appreciated her experience.

„In the hospital, I was in the maternity ward, but because my son was in the observation ward, I had to go back and forth between the two, and communication between the two was not good. It would help if one midwife would be available on the maternity ward, who always gives information about how things work. Everyone worked very hard. You can't blame the nurses. But every nurse who was new on the shift said something else. If you would have a midwife or a team of midwives who provide care after childbirth and also have a consistent concept for how things are done, that's something I would have found helpful.” (40 years, 1st child)

„Sure, they are not available in the hospital at any time, they're only there when things really get going and in between you don't see them for an hour or two because they're with someone who needs them more, and I would think it would be nice if they would be more available.” (35 years, 2nd child)

Physical and psychological aspects

With regard to physical aspects, it was important to women to receive good postpartum care.

„They were still there and took care of everything afterwards.” (39 years, 2nd child)

From the psychological perspective, study participants reported positive experiences regarding childbirth. However, they also described their fears related to childbirth and worries associated with having a newborn and emphasised a need for emotional support in this context.

„I've always felt that I didn't have a good sense of my body, or a strong intuition, and somehow during the birth I was totally surprised at how well the body can actually do it on its own.” (26 years, 1st child)

„When I was alone it wasn't so positive. I started to get scared, I didn't know exactly how to proceed. I had contractions for one and a half minutes, one minute break, and then one and a half minutes of contractions, so that I couldn't cope with it anymore and then I was more afraid or felt panic being alone, that was just a bit difficult.” (33 years, 1st child)

Early parenthood

Midwifery care

The women valued the competencies and expertise of midwives during early parenthood. This included professional and personal competencies, support to get used to the new everyday life, being prepared for the upcoming steps and that both the mother and the child received attention. The women acknowledged individuality in care, empathy, calmness and time resources of their midwives. They also underlined the empowerment and a trustful relationship with them. The women appreciated when responsibility and control was given to them by involving them as a new mother, in choosing topics to be discussed and by being empowered in becoming an expert for their own child.

Regarding the availability of their midwives, women valued when they conducted the first visit at home on the first or second day after leaving the hospital. Throughout early parenthood, it comforted women when midwives were reachable during most of the day, for example via text messages and through spontaneity in scheduling visits. Furthermore, women appreciated continuity of care provided by the same

midwife, clear and regular communication during substitution periods, when another midwife has to jump in, and continuity across multiple children.

„She has a great expert knowledge and experience. Support in any case, advice.” (36 years, 1st child)

„I lacked individuality from my midwife, you have to be much more individual and say 'everyone is different'. For example, in relation to breastfeeding, she recently said to me: 'Well, he has to drink for 30 min at a time', instead of saying: 'Everything is fine, the child is gaining weight and every child drinks differently. What bothered me during the postnatal period was when she said: 'It should be done this way and that way'. That she would rather say, 'Everything else is fine, the baby is gaining weight, he's awake, you're fine. From that point of view it's fine.'” (29 years, 1st child)

Involvement of family

Women reported support from their partners; in midwifery care, they wished for the partner to be involved. Women with a previous child had concerns whether they would be having enough time and capacities for the firstborn after the current pregnancy.

Another issue was the timing of first visits from family and friends, where women had problems saying 'no' or were happy to use the COVID-19 pandemic to avert visits.

„I really liked that my midwife included my partner. She didn't just look at me as a woman, which is important, she looked at us as a family: how to make it work.” (33 years, 1st child)

Need for information

The sources for information mentioned by the women were most often the midwives, followed by informal sources of information, predominantly other mothers, while the women were aware to be careful with well-intentioned advice. Other sources of information were the internet, the paediatrician and other experts, such as lactation consultants, when women did not feel sufficiently supported by their midwives. Topics on which they needed information related to both the mother, such as recovery and physical changes during the postpartum, and the child, such as sleep, lactation, nutrition, child development and the child's health. The information should be well-prepared and easily accessible, for example by the midwife, bringing up different topics or giving tips after observing mother and child. The information should be trustworthy and consistent. Moreover, it should be clear who the right person to address questions to is.

„My midwife regularly asked: 'Has something changed? How do you feel? How does that feel?'. And when I said, 'I'm getting less weekly flow', she asked exactly, 'How much? What?', to assess the situation. So, I really felt that I was in very good hands. I could quickly with cope with physical changes due to the support from the midwife who always assessed the situation and said, 'That's good, now it can still last for so and so long.' I found that really helpful.” (32 years, 1st child)

„One thing we did not discuss, which is important, would be evidence-based information. What me and my friends noticed: ask three midwives the same question and you get five answers. We really have midwives who contradict themselves depending on what day it is. For example, once my midwife was on vacation and another midwife who worked in the same midwifery practice visited me. So, they are colleagues and she told me exactly the opposite compared to my original midwife on several things.” (33 years, 1st child)

Orientation in healthcare system

Women reported visiting courses in the postpartum period. They valued input about other courses and services or the recommendation to consult an osteopath. The women appreciated being referred to other service providers for topics that do not belong to the midwife's

professional expertise.

„There are a lot of aspects, services that midwives offer, ranging from birth preparation and preventive care, postnatal care and rehabilitation during the postpartum period. It's not for everyone to cover every topic, so I think it's quite good when each midwife decides: 'These topics I can cover well and the other topics I am not responsible for'. I think if every midwife had to do everything, it would probably lead to a poorer care, because they just don't have expert knowledge in some areas in which another midwife has this expert knowledge. That's why I think this cross-linking is important.“ (29 years, 1st child)

„With my first child, I got a whole package and with the second child I didn't get anything at all. I don't know, if that's because it was the second child or if it's in fact the situation. I would like to have the whole offer again. My midwife practice has closed and I didn't know where to go to get all these healthcare services.“ (40 years, 2nd child)

Physical and psychological aspects

For the women it was important that their physical healing process is well-controlled and cared for. Moreover, women were concerned about different physical changes and valued that their midwives supported them in this process. Regarding bed rest, some women valued that they were recommended rest, as this was considered important, while other women experienced the bed rest to be burdening and would find movement more helpful. Another important issue was difficulties with lactation, for which women valued being given different options and support in trying them out. The health of the child was important but mostly well covered by both the hospital and the paediatrician.

Regarding the issues of birth injuries, not being able to sit, and also why I could not sit and so on, I was very well taken care of by my midwife, she also checked my birth injuries, gave me creams, all sorts of things, she removed stitches for example. She did everything at home, so I didn't have to go to the gynaecologist (34 years, 2nd child)

„My midwives gave me good recommendations, we tried everything for me to be able to breastfeed fully, with homeopathy, with other medicines, what could be the side effects of breastfeeding after birth or pumping and so on. It was just a source of stress for me. Well, my midwife gave me some really good advices.“ (35 years, 1st child).

While some women felt mentally well after childbirth, many women reported psychological strain, especially within the first days after giving birth. Receiving support from the midwife was valuable for these women who appreciated that she took away fears and was concerned about the women's psychological situation. In this context, women considered it crucial that the newborn and its needs should not always be the main focus but instead, the woman, who just became a mother needs to be sufficiently cared for. Women needed to find their way in their new everyday lives, which included accepting that they sometimes needed patience or that they needed to make sacrifices. While some primiparous women mentioned not having any previous experiences, others valued the experience they had already made in contact with the children of family members and friends. Furthermore, some multiparae were afraid of conflicts that might arise with the siblings of their new child.

„I was reassured by the information my midwife gave me: everything is OK, you may cry, you may be overwhelmed. That's alright. And I think that has helped a lot.“ (32 years, 1st child)

„When I was pregnant, I went for check-ups every four weeks. Everything was taken care of: blood values, urine, baby, etc. You are completely checked-up and monitored, every two weeks and up to every day at the end. Then the baby came. And suddenly, no one takes care of the mother anymore. Nobody was there. No contact person. I mean, I had a midwife then. If she hadn't been there, I don't know how I would have coped mentally, because I had all those problems too.“ (34 years, 2nd child)

Discussion

In this descriptive qualitative study on the expectations, preferences and needs of women towards midwifery care, we could identify six main categories regarding both childbirth and early parenthood: (a) involvement of family, (b) need for information, (c) physical and psychological aspects and (d) orientation in healthcare system. In each group, one main category about provision of healthcare was derived: (e) care around childbirth and (f) midwifery care in early parenthood.

In comparison to our previous findings in our companion manuscript on women's expectations, preferences and needs during pregnancy (Janke et al. 2024), we observed a need for more mental support and emotional bonding with their midwives during the phases of birth and early parenthood. The importance of promoting women's emotional health during and following childbirth is also supported by findings from international studies (Fenwick et al., 2013; Ojelade et al., 2017; Perkins et al., 2019).

The implementation of women's expectations, preferences and needs into the healthcare system with effective interprofessional teamwork within the continuity of midwifery care would strengthen healthcare provision and prevention (Renfrew et al. 2014; Lohmann 2018). In improving healthcare, research has shown the positive impact of a collaborative approach, which describes multiple healthcare workers from different professional backgrounds working together in providing comprehensive services and increasing the quality of care. This interprofessional collaboration aims to improve communication as well as access to care, and benefits from individual professional competence and skills, mutual respect and a shared goal of high quality care (King 2015).

While most women in the birthing phase and postpartum are in contact with multiple healthcare professionals, receiving care for both themselves and their children, structured communication is rarely taking place between those medical providers. Furthermore, structured communication is not reimbursed, so women are the carriers of their own health-related information. As a result, the interprofessional collaboration should be strengthened. This could improve women's experience and reduce their responsibility and burden of keeping track of all the relevant information. A German study showed that an interprofessional network of midwives, obstetricians and other medical professions can ameliorate prenatal care, especially for those with limited health literacy who might benefit from repetition of educational counselling in multiple settings and the involved healthcare professionals working closely together (Mattern et al. 2017).

Moreover, the need for consistent and standardised information from different healthcare professionals during and after birth was expressed by our study participants. To address this need, different healthcare paths could be developed and implemented in the guidelines (Wiegerts 2009). From this perspective, sharing information, implementing similar exchange platforms for users as well as for care givers could enable sharing experiences, promote decision making and learning from international context. There is already experience from the United Kingdom within the ASSIST project (Hotton et al. 2021). For vaginal birth, digital instruments and the i-decide platform have been used to promote women's decision making (Hotton et al. 2021).

A great challenge for the professional profile of midwives is the need for consultation on various aspects of women's lives and the multitude of new experiences and concerns in health behaviour, in caring for the child, in mediating between different healthcare givers and women, advocating for their needs and being the key contact person during and after childbirth. Since university study courses in Germany were reformed recently with the aim to educate experts providing evidence-based care throughout all phases of midwifery care, (Zyriax et al. 2022) transferring knowledge and experiences from healthcare practice into the curriculum and back to practice plays a decisive role. Thus, the study results on women's expectations, preferences and needs is crucial not only for healthcare provision during and following childbirth and

research (Mattern et al. 2017), but also for educational purposes. The academisation of the midwifery profession may help to reach a more systematic and continuous approach in education and thus in healthcare provision. Integrated and continuous approach is crucial for improving midwifery care (Utz et al. 2015). In other words, such a consideration would combine shared care between different professions (Green et al. 2015; King 2015), and enable a standardised, not fragmented healthcare provision (Mattern et al. 2017; Lohmann 2018). Furthermore, within Dutch framework comprising labour and birth a ‘watchful attendance’ in communication and information was highlighted (de Jonge et al. 2021; Leap et al. 2022). Within Swiss comprehensive maternity support the involvement and acceptance of women’s expectations, preferences and needs were emphasised, and underlined the role of the midwife as a key contact person within the continuity of care as a contribution to better healthcare provision (Floris et al. 2018).

Our study has some strengths. Conceptually, the usage of mixed methods based on the sequential exploratory design opened up new opportunities for future research in primary healthcare in regard to midwifery care (Vedel et al. 2019). We therefore consider the qualitative approach to achieve our research aims as another strength of the study, as qualitative methods have been regarded as an opportunity for in-depth insights from study participants and as a basis for quantitative tools. Moreover, according to COSMIN (Consensus-based Standards for the selection of health Measurement Instruments), a qualitative approach is crucial for PROM (Patient Reported Outcome Measure) development (Floris et al. 2018; Terwee et al. 2018), and the results of this study will be used as a basis for this. Another strength of our study is the fact that we closed the research gap along the whole continuity of midwifery care, which we observed in midwifery sciences in Germany. We involved multiple researchers in the data collection and the analysis, what is essential in qualitative research, and thus ensured data quality and reliability of results.

We faced a few limitations. The present research could not ensure generalisability, in other words representativeness, which is not usually achievable in qualitative research. However, we attempted to capture the heterogeneity of study sample as much as possible. Even though we recruited participants nationwide and with the intention of yielding a heterogeneous sample, the majority of participating women were resident in Northern Germany, especially metropolitan region of Hamburg, but experiences in delivery processes, in postnatal care and experiences in the postpartum period might differ between regions of Germany. A further selection bias was potentially introduced by the relatively high occupational status and thus higher educational status and health literacy of study participants. They were potentially more interested in the topic than women with a lower socioeconomic background. Nonetheless, the sample included perspectives from different subgroups of women, because they worked however in a very heterogeneous range of professional fields.

Our findings should be translated into health care delivery through the targeted development of guidelines to standardise the procedure steps, to develop consistent concepts midwives take along the continuum of care and information given to women. Furthermore, our study results could be implemented in the teaching of midwifery students and used for the development of the curricula nationwide. This would enable qualified midwives to transfer what they have learned into everyday care. Subsequent research will support the development of a tool assessing the quality of healthcare and quantifying the prevalence of different women’s needs. With this instrument, we intend to facilitate the adequate depiction of the care situation of women and to personalise care.

Conclusions

Based on our results, midwifery care should be further aligned to the actual needs of women. Health care during and after childbirth and early parenthood should be individualised, with emotional support, adequate

and professional information, consistency in interprofessional staffing and communication within a systematic and integrated approach to continuous midwifery care.

CRediT authorship contribution statement

Nataliya Makarova: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Toni Maria Janke:** Writing – review & editing, Writing – original draft, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Janne Schmittinger:** Writing – review & editing, Writing – original draft, Validation, Methodology, Investigation, Conceptualization. **Caroline Johanna Agricola:** Writing – review & editing, Writing – original draft, Validation, Supervision, Methodology, Investigation, Conceptualization. **Merle Ebinghaus:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Christine Blome:** Writing – review & editing, Writing – original draft, Validation, Supervision, Methodology, Investigation, Conceptualization. **Birgit-Christiane Zyriax:** Writing – review & editing, Writing – original draft, Validation, Supervision, Resources, Investigation, Conceptualization.

Declaration of competing interest

TMJ, NM, JS, CA, ME, and BCZ declare no conflict of interest. CB received grants or contracts to the institution from Amgen/Celgene, AstraZeneca, Bauerfeind, Pfizer, The EuroQol Group; speaker honoraria from Amgen/Celgene, AstraZeneca, Hartmann, Helios Klinik Leisnig, medi; support for attending meetings and/or travel from AstraZeneca, Hartmann, Helios Klinik Leisnig.

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References

- Association of the Scientific Medical Societies in Germany (AWMF). S3 guideline on vaginal birth at term. 2020.
- Baker, R., et al., 2020. Primary medical care continuity and patient mortality: a systematic review. *Br. J. Gen. Pract.* 70 (698), e600–e611.
- Bradford, B.F., et al., 2022. Midwifery continuity of care: a scoping review of where, how, by whom and for whom? *PLOS Global Public Health* 2 (10), e0000935.
- Bryanton, J., et al., 2008. Predictors of women’s perceptions of the childbirth experience. *Journal of Obstetric, Gynecologic & Neonatal Nursing* 37 (1), 24–34.
- Cummins, A.M., et al., 2018. Enabling new graduate midwives to work in midwifery continuity of care models: a conceptual model for implementation. *Women and birth* 31 (5), 343–349.
- de Jonge, A., et al., 2021. ‘Watchful attendance’ during labour and birth. *Sexual & Reproductive Healthcare* 28.
- Duncan, L.G., Bardacke, N., 2010. Mindfulness-based childbirth and parenting education: promoting family mindfulness during the perinatal period. *J. Child Fam. Stud.* 19, 190–202.
- Fenwick, J., et al., 2013. Women’s perceptions of emotional support following childbirth: a qualitative investigation. *Midwifery* 29 (3), 217–224.

- Floris, L., et al., 2018. Comprehensive maternity support and shared care in Switzerland: comparison of levels of satisfaction. *Women and birth* 31 (2), 124–133.
- Fontein-Kuipers, Y., et al., 2018. Woman-centered care 2.0: bringing the concept into focus. *European Journal of Midwifery* 2.
- Forster, D.A., et al., 2016. Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: results from the COSMOS randomised controlled trial. *BMC Pregnancy Childbirth* 16, 1–13.
- Green, B.N., Johnson, C.D., 2015. Interprofessional collaboration in research, education, and clinical practice: working together for a better future. *Journal of Chiropractic Education* 29 (1), 1–10.
- Hauck, Y., et al., 2007. The influence of childbirth expectations on Western Australian women's perceptions of their birth experience. *Midwifery* 23 (3), 235–247.
- Midwives' Association in Germany (2022). Midwifery support - what are you entitled to? Midwives' Association in Germany. (2009). Contract on the provision of midwifery assistance in accordance with Section 134a SGB V between the professional associations of midwives and the central associations of health insurance funds, last amended.
- Hildingsson, I., et al., 2021. Childbirth experience in women participating in a continuity of midwifery care project. *Women and birth* 34 (3), e255–e261.
- Homer, C.S., 2016. Models of maternity care: evidence for midwifery continuity of care. *Med. J. Aust.* 205 (8), 370–374.
- Hotton, E.J., et al., 2021. Outcomes of the novel Odon Device in indicated operative vaginal birth. *Am. J. Obstet. Gynecol.* 224 (6), 607 e601–607. e617.
- Janke, T.M., et al., 2024. Women's needs and expectations in midwifery care - Results from the qualitative MiCa (midwifery care) study. Part 1: preconception and pregnancy. *Heliyon* 10 (4), e25862. <https://doi.org/10.1016/j.heliyon.2024.e25862>.
- King, T.L., 2015. Interprofessional collaboration: changing the future. *Wiley Online Library* 60, 117–119.
- Kitzinger, J., Barbour, R., 1999. Developing Focus Group research: politics, Theory and Practice. Sage.
- Leap, N. and B. Hunter (2022). Supporting women for labour and birth: a thoughtful guide, Routledge.
- Lohmann, S., 2018. In Hamburg zur Welt kommen. *Gesundheit rund um die Geburt*, Oekom Verlag.
- Mattern, E., et al., 2017. Experiences and wishes of women regarding systemic aspects of midwifery care in Germany: a qualitative study with focus groups. *BMC Pregnancy Childbirth* 17 (1), 1–16.
- Mayring, P. (2015). "Qualitative content analysis: theoretical background and procedures". *Approaches to qualitative research in mathematics education: Examples of methodology and methods*: 365–380.
- Nilsson, I., et al., 2015. Parental experiences of early postnatal discharge: a meta-synthesis. *Midwifery* 31 (10), 926–934.
- Ojelade, O.A., et al., 2017. The communication and emotional support needs to improve women's experience of childbirth care in health facilities in Southwest Nigeria: a qualitative study. *International Journal of Gynecology & Obstetrics* 139, 27–37.
- Perkins, J., et al., 2019. Humanised childbirth: the status of emotional support of women in rural Bangladesh. *Sexual and reproductive health matters* 27 (1), 228–247.
- Perriman, N., et al., 2018. What women value in the midwifery continuity of care model: a systematic review with meta-synthesis. *Midwifery* 62, 220–229.
- Plappert, C., et al., 2019. The academization of midwifery in the context of the amendment of the German Midwifery Law: current developments and challenges. *Geburtshilfe Frauenheilkd.* 79 (08), 854–862.
- Renfrew, M.J., et al., 2014. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet North Am. Ed.* 384 (9948), 1129–1145.
- Sayn-Wittgenstein, F.Z. (2007). "Geburtshilfe neu denken". *Bericht Zur Situation und Zukunft des Hebammenwesens in Deutschland*. Bern: Verlag Hans Huber: 17–26.
- Terwee, C.B., et al., 2018. COSMIN methodology for evaluating the content validity of patient-reported outcome measures: a Delphi study. *Qual. Life Res.* 27, 1159–1170.
- Tong, A., et al., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int. J. Qual. Health Care* 19 (6), 349–357.
- Utz, B., Halim, A., 2015. Improving midwifery care worldwide. *Lancet North Am. Ed.* 385 (9962), 26–27.
- Vedel, I., et al., 2019. Why and how to use mixed methods in primary health care research. *Fam. Pract.* 36 (3), 365–368.
- Wieggers, T.A., 2009. The quality of maternity care services as experienced by women in the Netherlands. *BMC Pregnancy Childbirth* 9, 1–11.
- World Health Organisation, 2018. Intrapartum Care For a Positive Childbirth Experience. *World Health Organisation*, Geneva, 150.
- World Health Organisation (2021). "Global strategic directions for nursing and midwifery 2021-2025".
- Zyriax, B., et al. (2022). Hebammen in Hamburg – Aktuelle Entwicklungen und Herausforderungen. *Nachhaltige Stadt Gesundheit Hamburg II. Neue Ziele, Wege, Initiativen*. R. Fehr and J. Augustin. München, Oekom Verlag. 5.
- Zyriax, B.C., et al. (2022). Hebammen in Hamburg – Aktuelle Entwicklungen und Herausforderungen. *Nachhaltige StadtGesundheit Hamburg II*. R. Fehr and J. Augustin: 179.